ARNI RAUTIO
FIRE CHIEF

February 12, 1970

TO: The Honorable Mayor, Members of the City Council, Mr. Dale F. Curry, City Manager

FROM: Arni Rautio
Fire Chief

SUBJECT: 1969 Annual Report

I herewith submit the Annual Report of the Astoria Fire Department for the year 1969.

This report will consist of the Astoria Fire Departments' past history, activities of the Fire Department and Ambulance Department.

The following report is presented with every attempt to provide an interesting and statistical report of the departments' operations to the reader.

I wish to thank Fire Marshal James Gallagher and other members of the department who assisted in compiling the statistics for this report.

Respectfully submitted,

Arni Rautio

Arni Rautio
Fire Chief

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ASTORIA FIRE DEPARTMENT HISTORY

On August 12, 1870 Charles S. Wright, S. N. Anigoni, I. W. Case, A. Van Dusen and Charles Binder called a meeting to organize a volunteer fire company for Astoria. A permanent organization was established with an elected committee, I. W. Case, A. H. Sale, J. G. Hustler, George Flavel, S. N. Anigoni, Charles Binder, and A. Van Dusen, whose duties were to secure names of citizens to join, and raise funds to buy equipment.

Forty members were secured at the first meeting. The Company was named Astor No. 1. The Company uniform was black pants, red shirt with a wide collar which buttoned over the left side, and a black belt 3 inches wide, glazed with the Company name stamped upon it in gilt letters. Later the name of the Company was changed to Astoria Fire Company No. 1.

On November 7, 1870 a fire engine (a hand engine made by Hunnerman and purchased from the Portland Department) arrived on the steamer Okanagan. It was unloaded and taken to Capt. Flavel's warehouse. A charge of $3 a month was paid by the Company for housing the engine. On September 6, 1875 the engine was turned over to the common council. It was later sold to the volunteers of Independence, Oregon.

The first drill was directed by A. B. Hallock, foreman of Willamette Company No. 2 of Portland. This was the start of the present day Fire Department in Astoria.

The first fire call on the record books was on the night of August 30th at the home of H. A. Snow at Skamokawa and Washington Streets (now 5th and Commercial). Seventeen members responded and the blaze was promptly extinguished.

Rescue Co. No. 2, Astoria's second volunteer company was organized July 14, 1877. An engine house was built at what is now 11th and Commercial. A second class steamer, the same that took 1st prize at the Centennial Exposition at Philadelphia in 1876, was purchased for $5,000. It was a Silsby and was still in service at the time of the Astoria fire in 1922.

An Alert Hook and Ladder Co. was organized on June 12, 1877. They obtained a Hayes Patent 3rd class ladder truck which the city still has.

Columbia Engine Company No.3, the last Engine Co. to organize before the creation of the paid department, was created on September 7, 1890. Seventy-seven men joined the company. On November 6, 1890 the council gave them the new Clapp & Jones Steam Pumper which they operated until the installation of a gravity water system in Astoria. The pump was then traded to A. G. Long of Portland for 1000 ft. of $2\frac{1}{2}$-inch fire hose. The Portland Fire Department later bought the pumper from A. G. Long.

A chemical engine was bought and put in service on February 14, 1895. It was horse drawn with two 60-gal. chemical tanks.

The present Astoria paid fire department was created by the City Council in 1897. C. H. Stockton was appointed chief and held the office until October 31, 1904. The council then appointed C. E. Foster fire chief. He had been a member since 1883, when with other interested citizens he organized Engine Tender

Company of Rescue Engine Co. No. 2.

The equipment at that time was: 1 Champion chemical engine, twin 60-gal. tanks, 2 hose wagons, 3 hose reels, 5000 ft. of hose, and 6 horses. The reserve equipment consisted of: 1 Silsby Steam Engine 3rd class, 1 Amoskeg Steam Engine 2nd class, and one 55-ft. Hayes Patent 3rd class ladder truck. Water pressure was from 65 to 125 lbs. at the hydrants with a reserve of 6,000,000 gals.

An American LaFrance combination chemical and hose wagon was purchased in 1909. It was the 61st or 63rd truck of that type made by LaFrance. It was in active service until 1943 when the transmission gave up the ghost on one of our small hills. In 1911 another LaFrance was bought and put in service. It was the same model, the 239th of the series.

More paid regulars were added until 1922 at which time the department consisted of a chief, 12 paid men and about 12 call men. Mr. Foster remained as chief of the department until 1942 with the exception of four years when Gene Bussing was chief.

On December 8, 1922 - 2:00 A.M., a fire was reported burning behind the Beehive Department Store. This was the beginning of the Astoria fire which destroyed the heart of the business community. By 6:00 A.M. 32 square blocks were burning.

After a long night of fire fighting, 2,500 people had been left homeless. As a result of the fire many of the homeless moved to other areas.

The actual fire was extinguished in about 22 hours, but the embers in the debris burned for about a week.

The long job of rebuilding was underway before the last embers were put out. Businesses moved to new locations and new buildings rose on blackened rubble. The present downtown area rose from the ruins. The world and Astoria kept turning.

Wayne Osterby was appointed fire chief in 1942. He joined the department in 1922 and passed away in 1961 while directing the operation of the department during the Trinity Apartment fire.

Arni Rautio, the present chief, joined the Astoria Fire Department in 1938, and was appointed chief of the department from the ranks in April, 1962.

ASTORIA FIRE DEPARTMENTS OPERATIONS

The Astoria Fire Department protects an area of approximately 10 square miles within the city limits. The department operates three stations of which two are manned and the other is used for the storage of equipment and hose.

The fire department complement consists of 23 paid members, 10 student volunteers, and a part time secretary for the ambulance and fire department. The paid members of the department are: 1 Chief, 3 Battalion Chiefs, 4 Lieutenants, 1 Fire Marshal, and 14 firemen.

The fire department also operates under the Clatsop County Mutual Aid Assistance Agreement, which includes Cannon Beach, Seaside, Gearhart, Hammond, Warrenton, Lewis & Clark, Tongue Point Job Corp Center, John Day, Westport, and the Lower Columbia River Coast Guard Units. There are 28 pumpers and 7 tank trucks in the county, exclusive of the Crown Zellerback equipment.

The equipment in the department consists of the following:

1 - 1500 gallons per minute - 1969 - Seagraves Diesel Powered Pumper equipped with 3 inch hose, preconnected $2\frac{1}{2}$ and $1\frac{1}{2}$ inch hose line, and 1 turret piped directly to pump.
1 - 1250 G.P.M. 1962 Peter Pirsch Pumper which carries 3 and $2\frac{1}{2}$ inch hose, preconnected $1\frac{1}{2}$ inch hose lines and 1 turret piped directly to pump.
1 - 750 G.P.M. 1951 four wheel drive pumper which carries $2\frac{1}{2}$ and $1\frac{1}{2}$" hose.
1 - 750 G.P.M. 1946 Model 85 - Mack pumper which carries $2\frac{1}{2}$ and $1\frac{1}{2}$" hose.
1 - 500 G.P.M. 1941 LA France Ford equipped with foam manifold and tanks, 1 mounted turret and under dock fire fighting equipment. It carries 4 inch hose to supply heavy stream appliances and is equipped with a portable hydrant capable of supplying six $2\frac{1}{2}$" hose lines or two turrets.
1 - 500 G.P.M. Ford pumper equipped with $2\frac{1}{2}$" and $1\frac{1}{2}$" hose.
1 - Dodge Pickup.
1 - Willys Jeep, equipped with turret; foam gun and tank.
1 - International 1956 heavy duty rescue truck.
1 - First Aid Car. 1942 - Chevrolet - Used for ambulance substitute.
1 - 1964 Cadillac Ambulance.
1 - 1966 Chevrolet Sedan - Chiefs Car.
1 - 1967 Ford Sedan. Fire Marshals Car.
2 - 500 G.P.M. trailer pumps.
1 - 16 Ft. Boat.

All of the pumpers carry extension and roof ladders.

The department operates under a 56 hour week and the duty cycle is 24 hours on duty and 48 hours off duty.

At present, the fire alarm system consists of 4 circuits with 55 alarm boxes located throughout the city. The alarm system has 15 miles of overhead wire and 7,800 feet of underground cable.

The headquarters station is equipped with an auxilliary power plant in case of power failure. It will provide power for both radio networks and for the necessary equipment in the police and fire department to remain operational, however, we feel that it does not have the required output to operate all equipment required.

All fire department vehicles, with the exception of the jeep, are radio equipped. The department has two portable handie walkie talkie sets.

The department has six water turrets that can be operated at fires requiring large streams for extinguishment.

Last June, 1969, the City of Astoria took delivery of a Seagrave fire truck, 1500 G.P.M. Triple Combination Pumper powered with a 8V-71N Detroit Diesel Engine.

Members of the department attended the Command School, Fire & Arson Seminar, Oil Fire School, Conference on Civil Defense, Fire Protection of Structures Seminar, Explosive Ordinance Reconnoissance School, Plastics Seminar, Oregon Fire Marshals Association Annual Workshop, and other schools of one day duration.

Other activities of the fire department included the student volunteer program, firefighter aides program, continuation of up-grading the fire alarm system, inspecting and pre-fire planning of buildings, departmental maintenance program, and in-service training program.

FIRE DEPARTMENT

ADMINISTRATIVE STAFF

Chief of Fire Department

Arni T. Rautio

Battalion Chiefs

Donald Johnson
Carl Stone
Sidney Larsen

Fire Prevention

James E. Gallagher

Fire Alarm

Donald Johnson, Supt.
William Guindon, Asst. Supt.

Department Secretary

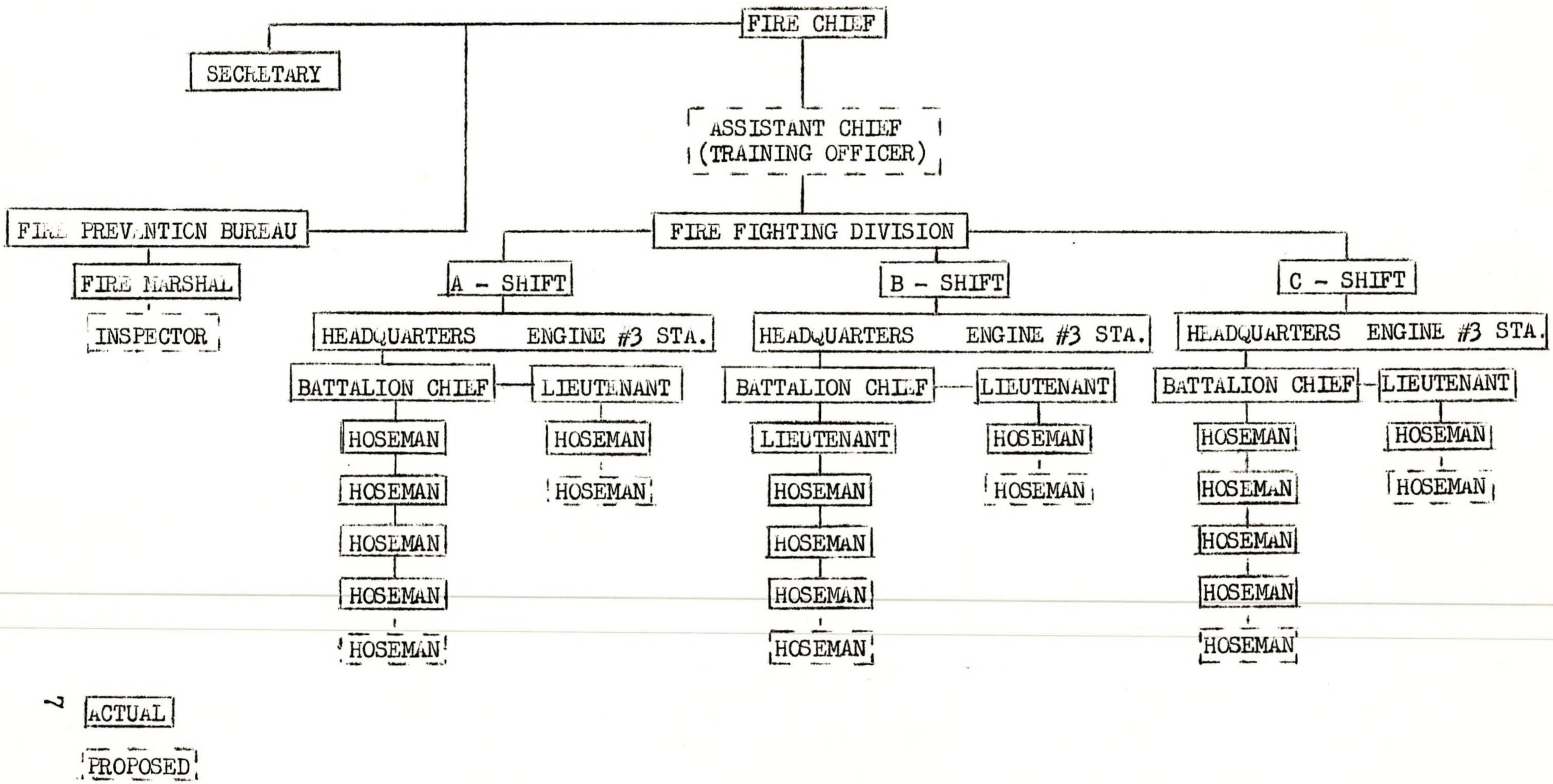
Edna Landro

FIRE FIGHTING FORCES

A. Shift	B. Shift	C. Shift
Carl Stone, Batt. Ch.	Sidney Larsen, Batt. Ch.	Donald Johnson, Batt. Ch.
William Hearn, Lieut.	Richard Williams, Lieut.	Rueben Kirkkunen, Lieut.
Thomas Rudolfi, Hoseman	Richard Vanwinkle, Lieut.	George Erveste, Hoseman
Charles Hicks, Hoseman	Leonard Farris, Hoseman	John Hagnas, Hoseman
Edward Selven, Hoseman	Dennis Waddell, Hoseman	Harlan Thompson, Hoseman
Eldon Wright, Hoseman	James McDermott, Hoseman	William Guindon, Hoseman
MaxE Clampitt, Hoseman	Herbert Demander, Hoseman	Gene Duren, Hoseman

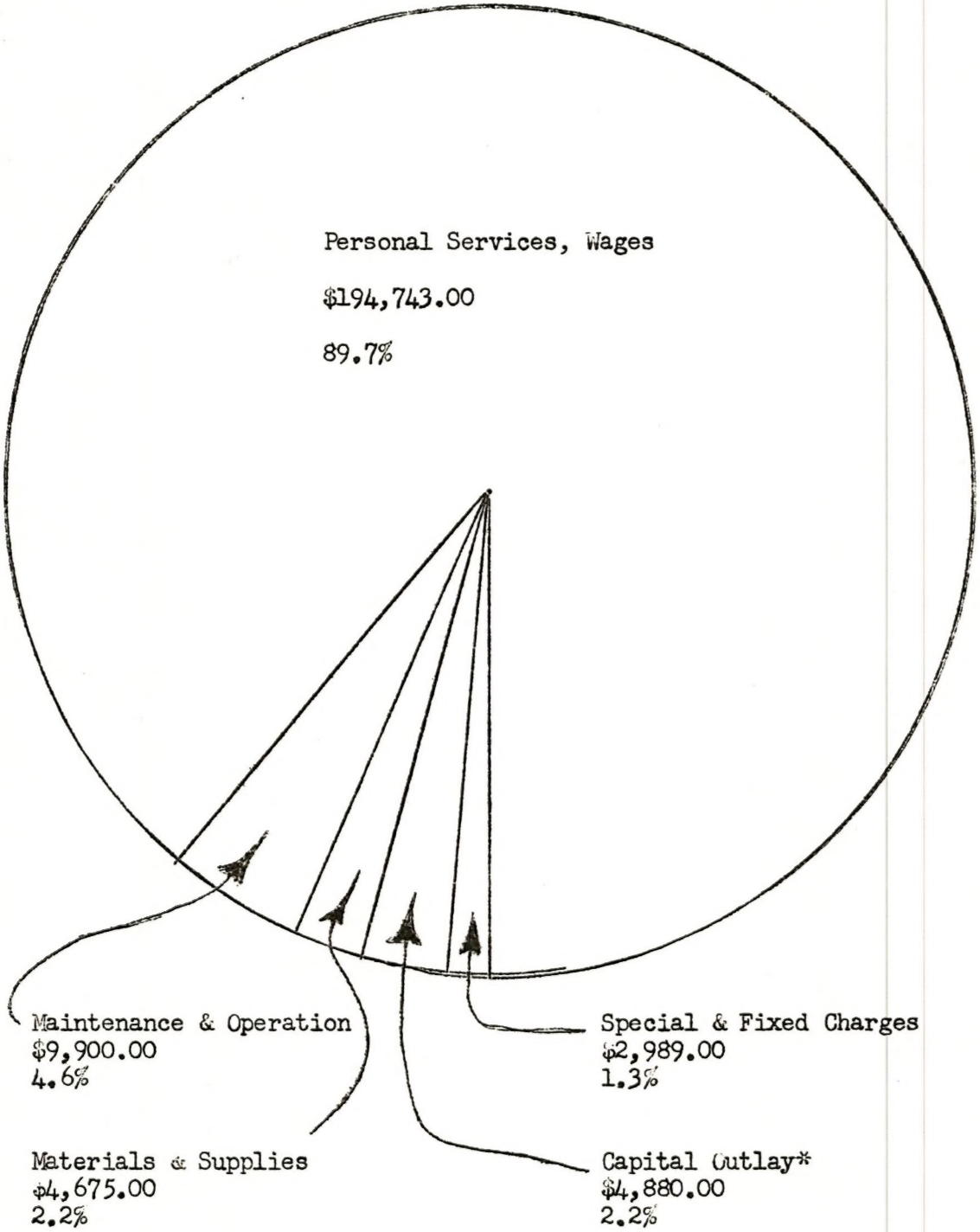
ASTORIA FIRE DEPARTMENT

PERSONNEL ORGANIZATION CHART



ASTORIA FIRE DEPARTMENT BUDGET

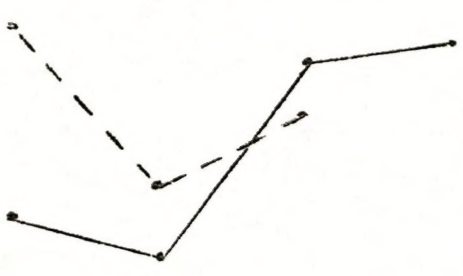
1969 - 1970



*Major Capital Outlay items are not listed.

DATA	
Area in square miles	10
Population	10,800
Assessed Valuation	$55,738,792.00
Assessed valuation per capita	$5,160.99
FIREMEN	
Members (total authorized)	23
Valuation per fireman	$2,423,425.74
Population per fireman	470
Firemen per 1,000 population	2.12
ALARMS AND FIRES	
Number of alarms (including false)	209
False alarms	49
No. of alarms (not including false)	160
Alarms other than fire	81
Number of fires	128
Fires per 1,000 population	11.85
No. of fires per million valuation	2.3
Fires with loss	51
Fires with no loss	108
LOSS	
Total	$60,393.00
Per $1,000 valuation	$.92
Per capita	$5.59
Per alarm (not including false)	$314.95
Per alarm (including false).	$288.96
Per fire where losses occured	$1,184.17
COST OF FIRE DEPARTMENT OPERATIONS	
(Based on current expense fund expenditures)	
Total	$217,187.00
Per $1,000 valuation	$3.89
Per capita	$20.11
Per alarm (including false)	$1,039.19
Per alarm (not including false)	$1,357.41
ANALYSIS OF FIRE LOSSES	
Fire loss per million valuation	$1,084.25
Average fire loss per building fire	$457.50

FIRE LOSSES



CITY OF ASTORIA	STATE OF OREGON
$65,000	$18,000,000
60,000	17,000,000
55,000	16,000,000
50,000	15,000,000
45,000	14,000,000
40,000	13,000,000
35,000	12,000,000
30,000	11,000,000
25,000	10,000,000

FIRE CALLS RECEIVED

	1966	1967	1968	1969
Phone	183	185	161	143
Street Box	65	85	59	54
Still	6	11	9	10
Police Intercom	0	0	2	2
Radio	17	9	0	0
TOTAL	271	290	231	209

TOTAL INCIDENTS RESPONDED TO BY OCCUPANCY

	Occupancy	1966	1967	1968	1969
1.	ASSEMBLY	6	5	10	5
2.	EDUCATIONAL	11	8	5	9
3.	INSTITUTIONAL	4	5	2	4
4.	RESIDENTIAL				
	A. Single Family	66	73	64	47
	B. Hotel, Motel, Apt.	21	10	17	10
5.	STORE & OFFICE	17	13	17	19
6.	INDUSTRIAL, BASIC	--	--	--	--
7.	MANUFACTURE	53	58	38	32
8.	STORAGE	5	16	4	4
9.	SPECIAL	89	102	74	77
	TOTALS	272	290	231	209

CAUSES OF FIRES AND ALARMS AND LOSSES BY CAUSES

	Number	Loss
Conflagration and/or Exposure	*	$ 23,000
Electricity and Defective Wiring	22	7,530
Explosion, Sparks from Combustion	8	---
Friction, Sparks from Running Machinery	3	100
Fireworks, Firecrackers	-	---
Hot Ashes and Coals, Open fires	1	---
Hot Grease, Oil, Tar, Wax, Asphalt, etc.	4	3,000
Hot Metals, Including Forgotten Electrical Appl.	1	25
Incendiarism, Believed Incendiarism	4	1,085
Lightning	-	---
Matches and Careless Smokers	24	6,273
Open Lights	-	---
Petroleum and its Products, Gases	10	50
Overheated/Defective Flues, Steam Pipes, etc.	14	---
Overheated/Defective Stoves, Furnaces, Heaters	30	8,700
Rubbish and Litter	13	---
Sparks on Roof	4	130
Spontaneous Combustion	1	10,000
Unknown Causes	1	---
Misc. Cause Known but not Classified	19	500
False Alarms	49	---
TOTAL	208	$ 60,393.
Mutual Aid Responded To	1	---
GRAND TOTAL	209	$ 60,393.
*Communication of Fires to Other Properties	1	

Sound value of properties at risk by fires, estimated	$ 52,445,984.00
Insurance Carried	$ 50,247,800.00
Total fire loss, estimated	$ 60,393.00

The above loss does not include the claims reported to the insurance companies which the fire department did not answer.

	1966	1967	1968	1969
Miles Equipment Traveled	967	1,127	937	785
Time Equipment In Service	137 hrs.	142 hrs.	126 hrs.	115 hrs.
3" Hose Laid	1,550 Ft.	1,600 Ft.	2,450 Ft.	2,150 Ft.
2½" Hose Laid	6,250 Ft.	8,050 Ft.	4,350 Ft.	6,000 Ft.
1½" Hose Laid	6,450 Ft.	4,900 Ft.	4,350 Ft.	5,550 Ft.
Booster Line Laid	24,000 Ft.	19,399 Ft.	14,050 Ft.	13,860 Ft.
5/8" Hose Laid	1,150 Ft.	650 Ft.	750 Ft.	850 Ft.
Foam Used	2½ Gals.	145 Gal.	5 Gal.	---
CO^2 Used	60 lbs.	135 lbs.	30 lbs.	30 lbs.
Dry Chemical	20 lbs.	4 lbs.	--	—
Ladders Raised	627 Ft.	450 Ft.	392 Ft.	540 Ft.
Number of Injuries	1	0	5	5
Number of Deaths	0	0	0	0

FIRE PREVENTION DIVISION

The Fire Prevention Bureau, under the supervision of the Fire Chief, has the responsibility to enforce the provisions of the Fire Prevention Code and investigation of fires as to cause. The Bureau performs fire prevention inspections of buildings and other premises, investigates complaints, and compiles monthly reports on fires, losses, and inspections.

To operate a successful fire prevention program it is essential that material and information from many other agencies of government be considered. Cooperative inspections and investigations by members of the following, with this department, has made it possible to enforce the fire code. For this cooperation we extend thanks:

OREGON STATE FIRE MARSHALS OFFICE
CITY OF ASTORIA BUILDING DEPARTMENT
CLATSOP COUNTY JUVENILE DEPARTMENT
CLATSOP COUNTY HEALTH DEPARTMENT
OREGON BUREAU OF LABOR - ELECTRICAL DIVISION
AND MANY OTHERS.

A total of 864 inspections were made by the Fire Prevention Bureau during 1969. These inspections included 628 routine inspections, 28 re-inspections, 22 new inspections, and 186 other inspections.

All fires were investigated and the causes determined whenever possible. Five juveniles were referred to Clatsop County Juvenile Department for fire setting and related incidents. During the year 1969 the estimated fire loss for the city amounted to $60,393.00 which is an increase of $4,488.00 over 1968.

The Bureau of Fire Prevention carried its educational program to the city schools, civic organizations and industrial groups.

The Bureau issued 530 burning permits, 6 L.P. Gas permits, and 11 other miscellaneous permits.

INSPECTIONS BY MONTH

	ROUTINE	RECHECK	NEW	OTHER INSPECTION	HAZARDS NOTED	HAZARDS REMOVED	VERBAL ORDER	RECOMMENDATION	PERMIT
JANUARY	39	4	3	4	14	22	10	-	4
FEBRUARY	70	2	3	2	110	47	5	1	3
MARCH	74	2	5	2	43	35	3	3	3
APRIL	70	2	2	16	34	36	9	4	2
MAY	35	2	3	-	49	33	-	1	1
JUNE	76	-	1	1	66	56	-	-	-
JULY	20	6	3	56	76	59	9	12	2
AUGUST	28	1	1	51	47	37	3	-	-
SEPTEMBER	18	1	-	23	90	86	5	-	-
OCTOBER	60	-	-	-	-	34	-	-	-
NOVEMBER	44	7	1	-	11	8	20	3	2
DECEMBER	94	1	-	31	20	18	2	4	-
TOTALS	628	28	22	186	594	471	66	28	17

864

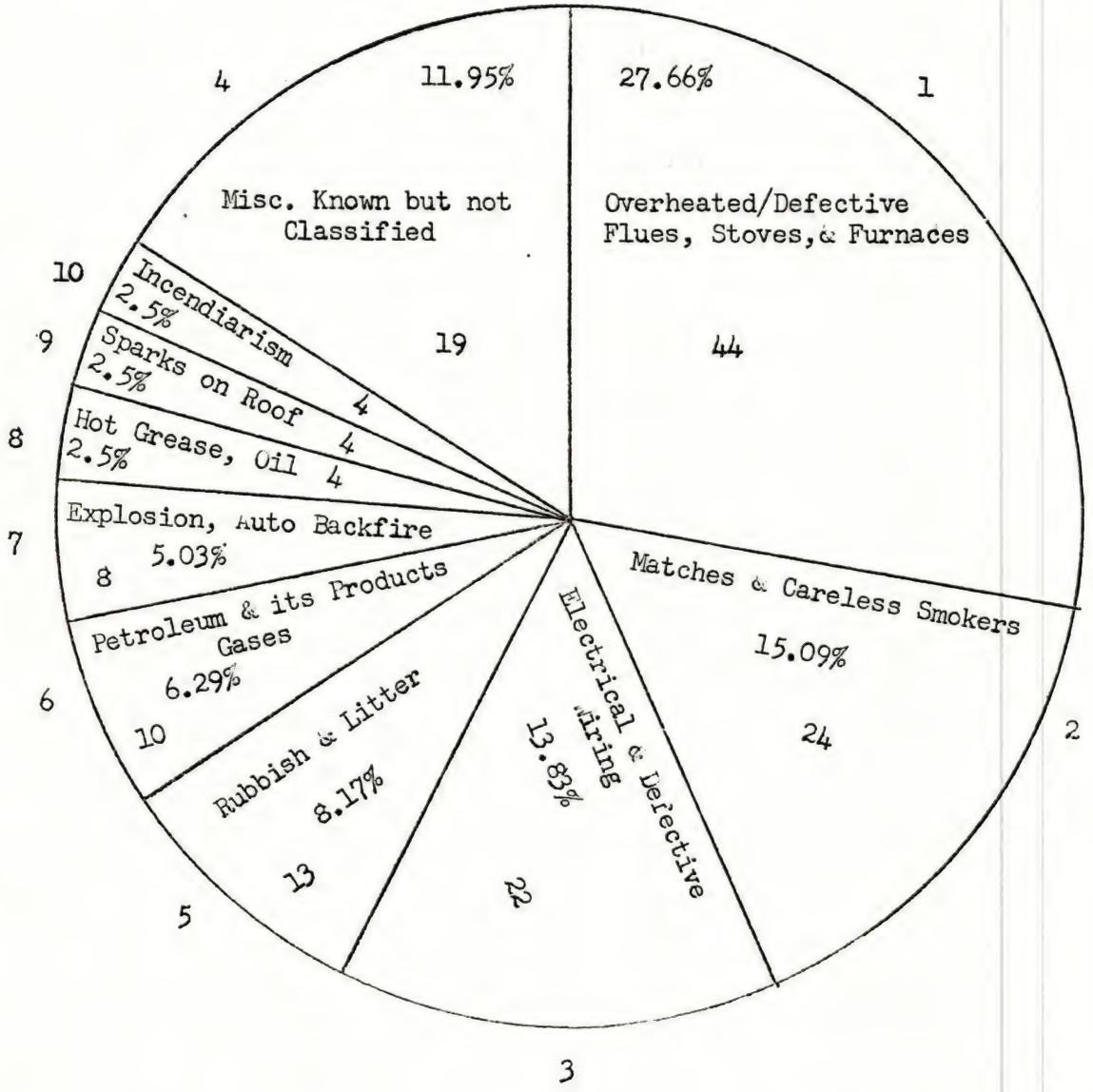
TOTAL
INSPECTIONS BY OCCUPANCY

1.	ASSEMBLY.....	103
2.	EDUCATIONAL.....	62
3.	INSTITUTIONAL.....	46
4.	RESIDENTIAL.....	110
5.	STORE & OFFICE.....	458
6.	INDUSTRIAL, BASIC...	1
7.	MANUFACTURE.....	26
8.	STORAGE.....	27
9.	SPECIAL.....	31
	TOTAL.....	864

INSPECTIONS BY YEAR

1966	1967	1968	1969
831	863	1,277	864

10 LEADING FIRE CAUSES



NUMBER OF FIRES: 159

NUMBER OF TEN LEADING CAUSES: 152

TOTAL NUMBER OF ALARMS: 209

GRADING SCHEDULE

The Oregon Insurance Rating Bureau completed the necessary work on the re-grading of the City of Astoria last April, 1969. The number of deficiency points assessed against the city on the overall survey amounted to 2292 points placing the city in a Class Five from the prior Class Four rating.

The guideline used for re-grading cities by the Oregon Insurance Rating Bureau is the "Standard Schedule for Grading Cities and Towns of the United States", published by the former "National Board of Fire Underwriters", now known as the American Insurance Association. The following is an excerpt from the schedule.

The grading schedule is a means of classifying municipalities with reference to their fire defenses and physical conditions. From a study of pertinent conditions and performance records extending over many years, certain standards have been developed; these are set forth in the schedule, and the various features of fire defense in the municipality under consideration are compared with them. For each deviation from these standards, deficiency points are assigned, the number depending upon the importance of the item and the degree of deviation. The total number of deficiency points charged against the municipality determines its relative classification.

Table #1 shows the formula for determining the maximum deficiency points and relative values assigned.

Table #2 shows the relative classes of municipalities and the corresponding range of deficiency for each class.

Table #3 shows the deficiency points assessed against the City of Astoria during the grading of the city in 1934, 1967 and 1968.

Tables #4, 5, and 6 show the deficiency points assessed against the items considered in the grading schedule.

TABLE 1

RELATIVE VALUES

	Points	Percent
Water Supply	1,700	34
Fire Department	1,500	30
Fire Alarm	550	11
Fire Prevention	350	5
Building Department . . .	200	6
Structural Conditions . .	700	14
Total	5,000	100%

TABLE 2

DEFICIENCY POINTS
FOR
GRADING CLASSES

1st Class,	0 - 500 Points	6th Class,	2501 - 3000
2nd Class,	501 - 1000	7th Class,	3001 - 3500
3rd Class,	1001 - 1500	8th Class,	3501 - 4000
4th Class,	1501 - 2000	9th Class,	4001 - 4500
5th Class,	2001 - 2500	10th Class,	4501 - 5000

Additional points of deficiency are applied under climatic conditions where these are in excess of the normal for the United States, and under divergence where the gradings of water supply and fire department are greatly different.

TABLE 3

CITY OF ASTORIA
DEFICIENCY POINTS

Area of Deficiency	Deficiency Points		
	1934	1967	1968
Water Supply	216	483	450
Fire Department	842	1097	1016
Fire Alarm	164	344	212
Fire Prevention	115	157	138
Building Department	68	66	66
Structural Conditions	392	265	265
Climatic Conditions	5	47	47
Divergence	108	120	98
Total	1,920	2,579	2,292
Class	4	6	5

TABLE #4

FIRE DEPARTMENT

Item		Points
1.	Number of Officers	27
2.	Number and Qualification of Operators	6
3.	Qualifications of Officers	6
4.	Chief's Tenure of Office	0
5.	Appointment and Promotion of Officers	0
6.	Enlistment Requirements	0
7.	Retirement Requirements	4
8.	Number of Engine and Hose Companies and Apparatus	24
9.	Number of Ladder Companies and Apparatus	107
10.	Distribution of Companies	11
11.	Total Manual Strength of Companies	265
12.	Manual Strength of Companies in or near the High-Value District	87
13.	Pumper Capacity 3,000	19
14.	Reserve Pumpers	1
15.	Condition of Apparatus	45
16.	Fireboats	150
17.	Powerful and Special Stream Appliances	2
18.	Small Stream Appliances	0
19.	Reserve Hose-Carrying Vehicles	0
20.	Amount of Hose	0
21.	Condition of Hose	9
22.	Emergency Equipment	3
23.	Minor Equipment	0
24.	Radio Communication	1
25.	Repair Facilities	22
26.	Salvage Appliances	3
27.	Fire Stations and Fuel	28
28.	Regulations and Discipline	12
29.	Training	45
30.	Response to Alarms	5
31.	Fire Methods	112
32.	Conditions Affecting Fire Department Operations	7
33.	Building Inspections	13
34.	Records	2
	Total	1016

TABLE #5

FIRE ALARM

Item		Points
1.	Management	9
2.	Maintenance Personnel	6
3.	Operators	7
4.	Headquarters	33
5.	Headquarters Apparatus	5
6.	Current Supply	1
7.	Apparatus in Fire Stations	3
8.	Type of Boxes	3
9.	Box Distribution	68
10.	Conspicuousness and Accessibility of Boxes	9
11.	Condition and Tests of Boxes	3
12.	Box Circuits	20
13.	Alarm Circuit Facilities	0
14.	Condition and Materials of Circuits	31
15.	Circuit Protection	1
16.	Wiring in Buildings	2
17.	Speed of Alarms	0
18.	Tests and Records (except box tests)	5
19.	Radio	3
20.	Adequacy of Commercial Telephone Service	2
21.	Fire Department Telephone Service	0
22.	Telephone Alarm Transmission	0
23.	Reserved Telephone Lines	1
	Total	212

TABLE #6

FIRE PREVENTION

1.	Authority and Control	10
2.	Supplemental Fire Prevention Activities	7
3.	Flammable or Compressed Gases	8
4.	Flammable Liquids	22
5.	Special Hazards	29
6.	Miscellaneous Hazards	24
7.	Electrical Wiring and Equipment	38
	Total	138

The recommendations offered by the Oregon Insurance Rating Bureau when planning future improvements in the fire protection facilities are as follows:

Those marked with an asterisk are of the greatest importance in providing better fire protection:

FIRE DEPARTMENT

1. That additional officers be appointed.
* 2. That an aerial ladder company be installed.
* 3. That a fireboat be installed and provisions made for manning it.
* 4. That additional manpower be provided in order to obtain a greater response at all times.
* 5. That a drillmaster be appointed and an adequate training tower or training building be provided.

FIRE ALARM

* 1. That fire alarm system components continue to be installed according to the National Fire Protection Association's Standard No. 73. Municipal Fire Alarm Systems, using the latest standards available.
2. That the system be extended to all built-up areas of the City, particularly in commercial and industrial districts.
* 3. That fire alarm headquarters construction and location be according to Standard No. 73.
4. That all street boxes be automatic ground return type and that master type boxes preferably be series type.
5. That box distribution be improved to at least meet the requirements of Standard No. 73 for high value districts.
6. That sufficient box circuits be installed and laid out so that the area which would be left without box protection in case of disruption of a circuit will not exceed that area covered by 20 properly spaced boxes. However, the number may be expanded to 30 properly spaced boxes where the circuits are entirely underground.

FIRE PREVENTION

* 1. That the 1968 edition of the National Electrical Code be adopted and adequate provisions made for strict enforcement.

2. That all homes be inspected annually.

Estimated cost to the City of Astoria to reduce the assigned deficiency points to regain the prior Class Four rating. Cost figures are based on present day operations.

		Estimated Cost	Points
1.	Additional Manpower (6 men)	$60,000.00	110
2.	Aerial Ladder Truck	80,000.00	80
3.	Fire Boat	60,000.00	100
4.	Drill Master &	10,000.00	
	Training Tower	40,000.00	50
	Estimated	$ 250,000.00	340

The following shows fire insurance premium rate increases for various commercial buildings after the 1968 re-grading. These figures show standard rates with standard credits applied, at 90% value for insurance on existing buildings:

Example #1

Restaurant; Type III construction, 2 story with an approved hood and vent fire extinguishing system installed.

	Building	Contents & Equipment
Class 4	$4.95 /M	$9.49 /M
Class 5	6.82 /M	10.43 /M
Amount of increase	1.87 /M	.94 /M

Example #2

Restaurant; Type III construction, 2 story without an approved hood and vent fire extinguishing system installed.

	Building	Contents & Equipment
Class 4	$13.10 /M	$18.72 /M
Class 5	16.32 /M	21.76 /M
Amount of increase	3.22 /M	3.04 /M

Example #3

Library; Type II construction, 1 story with a partial automatic sprinkler system installed in the basement.

	Building	Contents & Equipment
Class 4	$1.40 /M	$2.08 /M
Class 5	2.02 /M	2.80 /M
Amount of increase	.62 /M	.72 /M

Example #4

Public Office Building; Type II construction, 2 story. Extra credit for being publicly owned has not been applied.

	Building	Contents & Equipment
Class 4	$ .30 /M	$ .32 /M
Class 5	.49 /M	.49 /M
Amount of increase	.19 /M	.17 /M

Example #5

Hospital; Type I construction, 4 stories.

	Building	Contents & Equipment
Class 4	$ .34 /M	$ .67 /M
Class 5	.43 /M	.78 /M
Amount of increase	.09 /M	.09 /M

Example #6

Hardware Store; Type III construction, 3 stories.

	Building	Contents & Equipment
Class 4	$2.25 /M	$5.26 /M
Class 5	5.34 /M	9.06 /M
Amount of increase	3.09 /M	3.80 /M

The above figures show that the reclassification of the city, from Class 4 to Class 5 has cost the commercial building owners far in excess of the 13% rate increase experienced by the average homeowner.

COMPARISON OF ANNUAL DWELLING PREMIUMS
FOR A CLASS "D" (FRAME) DWELLING
UNDER VARIOUS CLASSES OR PROTECTION

Protection Class	Building Amount of Insurance			Contents Amount of Insurance		
	$5,000	$10,000	$25,000	$2,000	$4,000	$10,000
2	$13.10	$15.00	$25.20	$ 9.62	$10.38	$14.10
3	14.40	16.45	27.60	10.57	11.39	15.45
4	15.90	18.15	30.27	11.75	12.65	17.07
5	17.55	20.05	33.67	12.86	13.86	18.82
6	20.05	22.95	38.52	14.75	15.89	21.57
7	23.55	26.90	45.07	17.31	18.65	25.27
8	27.60	31.65	53.17	20.29	21.91	29.77
9A	46.85	65.70	133.50	29.69	37.23	63.45
9B	51.80	75.60	158.25	31.67	41.19	73.35
10	55.00	82.00	174.12	33.01	43.81	79.77

AMBULANCE DEPARTMENT OPERATION

In 1956 the City of Astoria went into the ambulance business after the local taxi company discontinued their operation. It was not economically feasible for the company to continue its operation due to the high replacement cost of equipment and insufficient revenue from the operation.

The City of Astoria provides ambulance service primarily for Astoria, also to the communities of Hammond, Warrenton, Lewis & Clark, Knappa-Svensen, and other areas of the county when requested.

The ambulance service is operated by the Astoria Fire Department under the supervision of the Fire Chief. The Fire Department members are assisted by College Student Volunteers who live at the fire station during the school year. They are not available during school hours or summer vacations, however, 3 fire fighter aides are hired during the summer months. A driver and an attendant, (paid fireman or student volunteer) man the ambulance on every trip.

The members of the fire department have completed the required first aid courses for ambulance operation. The student volunteers are required to have a standard first aid card before they can respond on ambulance calls.

In the past, the fire department personnel have received additional training in regards to emergencies encountered while responding to ambulance calls. Recently the members completed the Medical Self-Help Course and presently are taking a 40 hour Emergency Medical Course for Ambulance Drivers and Attendants, sponsored by the American College of Orthopedic Surgeons.

Since 1956 several independent operators have tried to operate the ambulance business in Astoria without any success. After each attempt the City of Astoria was back in the ambulance business.

In 1962 the City realized that as a private venture the ambulance business was not a profitable operation, due to the scarcity of population in Clatsop County. An ambulance committee was formed to try and resolve some of the problems the city was faced with and to organize a volunteer ambulance corp if at all possible. A concentrated effort was made by the committee and Fire Chief to secure volunteer personnel to operate the ambulance.

The committee asked the cooperation of all organizations and citizens of the community to assist in providing volunteer ambulance service being this would be the least costly to the city. It felt that if the volunteer unit could not be operated successfully then the operation would be a costly one to the city. The committee recommended not operating the ambulance service from the fire department since it would cost the salaries of extra firemen and the insurance rating of the city could also be affected accordingly.

An intensive campaign to recruit volunteer ambulance personnel was conducted by the committee and Fire Chief. Several of the local citizens volunteered their services, however, the overall campaign was not successful.

The ambulance operation was assigned to the fire department and is still the departments responsibility. It is the intent of the City of Astoria to eventually discontinue the ambulance operation and have it placed under the jurisdiction of Clatsop County.

The following excerpt is from the Management Information Service conducted by the International City Managers' Association.

Many fire departments operate an ambulance service. In almost all cases it is strictly an emergency service and is used only for transportation of the critically ill or injured. In some cases, the vehicle is a full-scale rescue truck.

Ambulances operated by fire departments usually offer high-quality service. The men are carefully selected, and most fire departments have good training programs. Further, the personnel are familiar with operating in emergency situations, know the city, and can rapidly receive back-up assistance for rescuing or removing victims from difficult locations. At the same time, it is expensive service, for the men are unproductive except when they are on a call, cleaning up, in training, or resupplying their vehicle. Their salaries are usually well above those paid ambulance attendants.

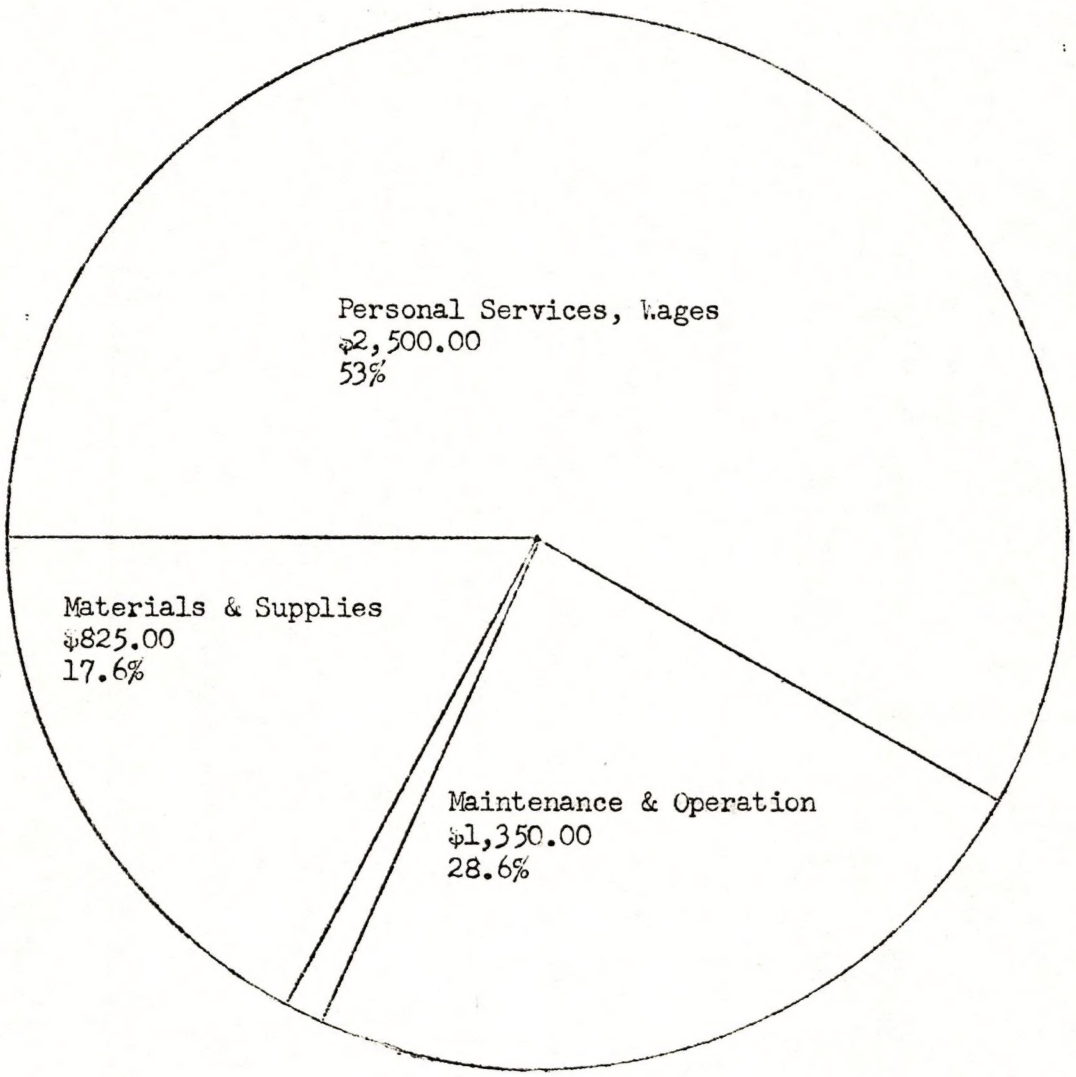
While there is a general feeling that this is a good way to use firemen when they are not on a fire call, this is an incorrect assumption. Men assigned to ambulance service are not counted in the strength of the fire department in determining the underwriters' rating for fire protection. They cannot respond both to an ambulance call and a fire call concurrently, and even when they accompany fire equipment to a fire, they are not used to fight the fire so that they will be available for a medical emergency.

There is an additional problem in attaching ambulance service to the fire department. No fire department charges for fighting a fire. Thus, it is difficult to charge for fire department-operated ambulance service. In one community, during the time the fire department operated the ambulance service, calls averaged twenty-three a day. Seeing this volume of work, a private operator contracted with the city to operate ambulance service with a charge. Volume dropped immediately to ten calls a day, and the private service was out of business in a few months.

While the fire department can offer great assistance in certain types of emergencies, there are serious questions as to whether it should operate a regularly used ambulance service. There is no doubt that the fire department cannot be the only ambulance service in town, for firemen can take only emergency calls and there must be some other service available for transporting invalids or emergency cases to medical centers.

AMBULANCE DEPARTMENT BUDGET

1969 - 1970



Special & Fixed Charges
$40.00
0.8%

AMBULANCE DEPARTMENT

OPERATIONS

	1966	1967	1968	1969
PATIENTS TRANSPORTED	478	479	456	413
TYPE OF RESPONSE				
NON-EMERGENCY	*	165	164	130
EMERGENCY	*	295	275	284
TOTAL CALLS	444	460	439	414
RESPONSE BY LOCATION				
IN-TOWN	266	275	274	280
OUT OF TOWN	178	185	165	134
RESPONSE BY MEMBERS				
FIREMEN	592	629	646	513
VOLUNTEERS	296	290	232	315
TOTAL RESPONSE	888	919	878	828
HOURS AMBULANCE OPERATED	417	448	399	241
MILES AMBULANCE TRAVELED	9,298	10,851	9,300	4,656
TIMES FIRST AID CAR SUBSTITUTED FOR AMBULANCE	16	8	25	3

* Statistics not kept this year